

Course Outcomes

Goal 1. To promote critical thinking skills by employing the scientific method.

Outcome 1.1 Students will be able to formulate testable scientific hypotheses

Outcome 1.2 Students will be able to propose a well-designed experiment

Outcome 1.3 Students will be able to analyze and evaluate data in order to draw conclusions.

Outcome 1.4 Students will relate conclusions to key biological concepts.

Goal 2. To perform basic laboratory techniques.

Outcome 2.1 Students will be able to read and accurately follow a scientific protocol.

Outcome 2.2 Students will be able to correctly use basic tools and laboratory equipment, such as micropipette, spectrophotometer, gel electrophoresis equipment, light compound microscope, dissecting microscope.

Outcome 2.3 Students will be able to perform basic lab techniques such as loading gels, handling histology slides, swabbing bacterial plates.

Outcome 2.4 Students will be able to collect and record accurate laboratory data and properly enter and access data in a shared online database.

Outcome 2.5 Students will be able to perform basic troubleshooting when using lab equipment.

Goal 3. To promote scientific communication skills.

Outcome 3.1 Students will present their findings to their peers orally.

Outcome 3.2 Students will draft a scientific style research paper.

Outcome 3.3 Students will practice giving appropriate and useful feedback to their peers.

Outcome 3.4 Students will be able to receive peer feedback and objectively consider it.